

Nguyen M. Nhat

Catalyzing Quan họ
for cello & electronics

2021

Performance Notes

Duration: 8 min

The piece is dedicated to James Alexander and his lecture recital on cello performance in Vietnamese art music. “Catalyzing Quan họ” imagines taking the Vietnamese folk genre Quan họ into a lab and dissecting it, adding new parts onto it and modifying its component, in hopes of searching for its compatibility with “foreign” elements and allowing a rapid transformation to take place in itself. The piece’s structure should also be treated like a game, where the performer goes through different stages and carries out instructions from the electronic part.

Proportional notation

The image displays two systems of musical notation. The first system, starting at measure 45, is written in a 3/4 time signature and features a melodic line with dynamics *mf*, *f sub.*, and *p*. A horizontal line above the staff indicates a spatial duration of $4'' \approx 5''$. The second system, starting at measure 19, is written in a 3/4 time signature and includes dynamics *mf* and *p*. It features a triplet of notes and is annotated with *con vib.*, *pont.*, and *normal*. A horizontal line above the staff indicates a tempo range of $\text{♩} = 54 \approx 55$.

Rhythmic values should be treated proportionally or as ratios to one another under the influence of a tempo or time range. The purpose is to allow different ways in which the music could be played, a bit faster or a bit slower. The range of time also means that a 16th note for example, in one moment can be either shorter or longer than compared to another 16th note in another moment. In other words, this notation system is constructed in a quasi-improvisatory way, where elements like “rubato” or “improvisation” or “imprecision” are encouraged.

Reading the score: each system will spatially take up 12-14 seconds. If there is blank space at the end of the system, this does not mean silent or rest time, but the performer should simply move onto the next system as soon as there is no material left on the current system.

Key

♯ ♮ = exact quarter-tones

♯ ♯ ♯ ♯ = inexact microtones


× = no pitch (played on the bridge)

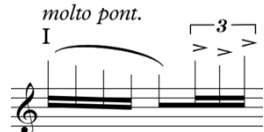
▼ = slap fingerboard with hand


⊕ = silence or cut out all controllable sound sources

pont. = sul ponticello

~~~~~ = perform molto vib. & *pont.* on a specific note

low med high  
 = hit the body of the cello with hands similar to beating/tapping a drum. This is accompanied by the percussion clef.

*molto pont.*  
 = notes with only stems refer to pitches that are not meant to be exact or specific

 = reactionary circles are accompanied by an arrow to a specific “target” in the electronics part. The target is what the cellist will react to. Here, as soon as the performer hears the target, they will “react” at varying speeds, specifically ranging from quarter to 64th rhythmic values (slow to fast reaction). These values are **not** bound by tempo, but rather the performer’s sense of a quick or slow

reaction. There are two scenarios: 1. The reaction occurs while the cellist is holding a note; 2. The reaction occurs while the cellist is not playing anything. The performer should move on after they have completed their reaction time.

Variable boxes: freely jump between boxes with the order of your choosing

The cellist's voice:

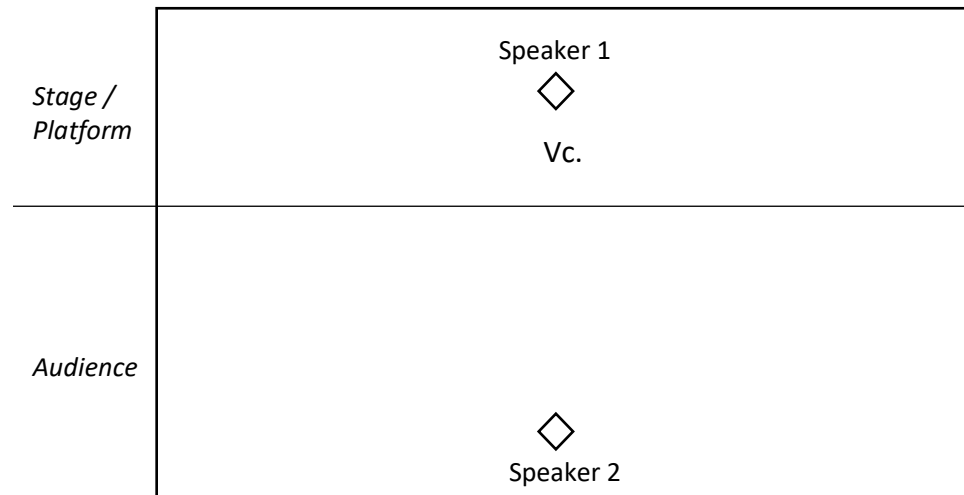
- At m. 1: the performer will sing in Vietnamese and in Quan họ style
- At m. 13: sh(i) consists of “sh” which is the main sound with no definite pitch and “(i)” which controls the shape of the mouth

Notational contradiction in m. 16-17: the stems are used to show the voicing of two different timbres in the electronic part, but do not mean any specific rhythmic value.



= sound of gears shifting in the electronic part (occurs throughout the piece)

Concert Venue Layout



## Equipment

- Macbook Pro or equivalent laptop with DAW or simple audio player
- 2 speakers
- Audio interface with at least 3 outputs (2 speaker, 1 headphone outs)
- Headphones/earplugs for click/cue track

## Bibliography

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Thúy Hương. 2004. “Ngồi tựa mạn thuyền” from *Giai điệu quan họ*. Hồ Gươm Audio-Video.

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# Catalyzing Quan họ

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♩ = 49 ≈ 51

do not try to sync with electronics

clicktrack cue at ♩ = 50  
"3, 2, 1" then begin

"Gears" sound signal that you should finish up your gesture quickly, if you haven't already done so

Continue onto the next measure once the gears have stopped shifting

Violoncello

Cellist's voice

Electronics

RECORDING of composer singing "Ngôi tựa mạn thuyền"

Vc.

Electr.

(Recording of composer singing "Ngôi tựa mạn thuyền") ...

3" 3" 3" 3"

hear electronics demonstrate tuning (focus on E-half-flat)

*senza vib.*

adjust tuning if needs be to perfectly match electronics

*molto vib.*

Vc. *p* *ffff*

Electr. **SINE TONE** *p*

Detailed description: This musical score shows a four-measure sequence for Violin (Vc.) and Electronics (Electr.). Each measure is 3 seconds long. The Vc. part starts with a circled note and a '3' above it. The first measure is marked 'senza vib.' and 'p'. The second measure has an annotation 'adjust tuning if needs be to perfectly match electronics'. The third measure is marked 'molto vib.' and 'ffff'. The Electr. part is labeled 'SINE TONE' and 'p'.



3" 3" 3" 3"

*molto vib.*

Vc. *p sempre* *ffff*

Electr. "puff" *p* *p*

Detailed description: This musical score shows a four-measure sequence for Violin (Vc.) and Electronics (Electr.). Each measure is 3 seconds long. The Vc. part starts with a circled note and a '7' above it. The first measure is marked 'p sempre'. The second measure is marked 'molto vib.' and 'ffff'. The Electr. part has a 'puff' annotation with an arrow pointing to a circled note in the first measure, and 'p' markings in the second and fourth measures.



3" *molto vib.* 3" *senza vib.* 3" (let vibrate) 3"

Vc. 11

*ffff* *ffp* *f* *fff*

Cellist's Voice

sh(i) *fff*

8<sup>va</sup>

Electr. *p* 8<sup>vb</sup>

2" 3" 3" 2"

Vc. 15

*p* *ffff* *molto vib.*

MIDI CELLO (MIDI CELLO)

Electr. *f* *p* SINE TONE

♩ = 54 ≈ 55

Vc. *con vib.* *pont.* *normal*

19 *p* *mf* *p*

continue onto the next measure once the gears have stopped shifting

MIDI CELLO

Electr. *mf* 4.70"

♩ = 52 ≈ 53

Vc. *pont.* *normal pont.*

20 *pp* *mf* *f*

clicktrack cue at ♩ = 72  
"3, 2, 1" into next measure

MIDI / SAMPLED LUTE

Electr. *p* 2.56" 3.39"

clicktrack cue at ♩ = 60  
"2 and 1 and" into pickup

♩ = 72  
follow clicktrack mechanically

Vc. *f sempre*

21

2"  
*n* *f sempre*

♩ = 60  
follow clicktrack mechanically

(abruptly cutting off)

"switching channel" effect

Electr.

*f*

clicktrack cue at ♩ = 66  
"1 and" into pickup

♩ = 66  
follow clicktrack mechanically

Vc. *n* *f sempre*

29

(1")

≈ 7"  
sord. on

(abruptly cutting off)

RECORDING of Quan ho excerpt →

Electr.

*f*

♩ = 66

Vc. <sup>33</sup> *pont.*  
"fade in" "fade out" sord. off

Electr. **RECORDING of Quan ho excerpt** → 1.83" 3.13"



Vc. <sup>37</sup> 12" \_\_\_\_\_

Electr. **BOT NARRATION + SINE TONE**



Vc. <sup>38</sup> 5" \_\_\_\_\_

Electr. 1.69" 2.39" "BEGIN"

3" 3" 3" 3"

tune pitches to sine tone

39

Vc. *senza* → *molto vib.* *senza* → *molto vib.* *senza* → *molto vib.* *senza* → *molto vib.*

Electr.

SINE TONE

293.665Hz 335.617Hz 419.521Hz 461.473Hz

3" 3"

*senza* → *molto vib.* *senza* → *molto vib.*

43

Vc.

Electr.

503.425Hz 587.330Hz

MIDI CELLO

2.20" 3.10" 7.70" 4.63"

"PROCESSING" "LOADING"

MIDI CELLO playing Quan ho excerpt

4" ≈ 5" 3" ≈ 4"

45

Vc. *mf* *f sub.* *p*

Electr.

RECORDING of various Quan ho songs

imitate & improvise gears shifting sound with:  
 1. knocking on cello body with any part of the hand  
 2. bowing palm-muted strings

$\text{♩} = 48 \approx 52$   
*normal*

Vc. *mf* *p* 3.25"

Electr. **RECORDING** of various Quan ho songs

47 *free bowing*

Vc. *continue onto the next measure*

Electr. **RECORDING** of pre-recorded cello followed by *Ngôi tựa mạn thuyền* excerpt

$\text{♩} = 73 \approx 74$

Vc. *radiant* *p* *ff* 1.75" with "disc scratch"

Electr. **RECORDING** of pre-recorded cello followed by *Ngôi tựa mạn thuyền* excerpt

*clicktrack cue at ♩ = 60 - "1 and" into next measure*

♩ = 59 ≈ 61 allowing leisure

Vc. *dolce* *p* *f* *mf* *p* *normal* *pont.* 3

Electr. INSTRUMENTAL ACCOMPANIMENT

Vc. *f* *mf* *f* *mf* *pizz.* *arco* 3

Electr. 0.75" 3.50" "disc scratch"

Vc. 61

Electr. 6.28" 4.69" RECORDING MASHUP

**Variable boxes**

Each box = 1.52" ≈ 4.11"

62

Vc. *f* (or lowest comfortable C) gl. ≈ 0.76" ⊕

Vc. Vx *mf* (or lowest comfortable G) gl. ≈ 0.76" ⊕

*mp* (or lowest comfortable D) *molto vib. gl.* ≈ 0.76" ⊕

*f* (or lowest comfortable D) gl. ≈ 0.76" ⊕

II *tr*


(trill between harmonic and no harmonic on D string)

clicktrack cue at ♩ = 92  
"3, 2, 1" into next measure

a  
oi  
i  
hi

**SINGING VOICE**

♩ = 110

Electr. gl. gl. gl. gl. 3.34" 

Sấp mưa\_ sấp mưa\_ Những con môi bay í í ra\_ Mọi trẻ bay cao í a\_ Mọi già



♩ = 92 Groovy, funky

63

Vc. *f sempre*

SINGING

ELECTRIC PIANO

Electr. 2.42" ⊕

1.81" 

clicktrack cue at ♩ = 60  
"3 and 4" into next measure



64 ♩ = 60

Vc. *p* *f* *pp* *mf sempre* abrupt cut-off

**MIDI CELLO & MISCELLANEOUS**

Electr. *p* *f* *pp < f > mf sempre* 1.06" 2.55"

♩ = 58 ≈ 60

do not try to sync up with electronics, follow your own pace

Vc. *f* *p* *f* *f* *pizz.* mute immediately

**RECORDING & ORCHESTRA** → 6.76"

Electr.

≈ 10"

69

slap fingerboard w/ hand

arco (mini gliss.)

restart box whenever you hear a new Quan ho song & until the electronics stop

*fff* *f sub.*

Electr.

QUAN HO SONGS COLLAGE

4.23"

+ "3 scratches"



4" ≈ 6"

play this excerpt of Bach Cello Suite in G major - Sarabande

a bit rushed

as fast as possible

70

**Sarabande.**

*gliss.*  
IV

*ffp* *ff*

Electr.

RECORDINGS OF QUAN HO & OTHER GENRES

10" ≈ 11"

play this excerpt of Lachenmann's *Pression* without his original scordatura requirement

71

♩ ca. 66 (Bogen wird zumeist in der geschlossenen Faust gehalten)

Hölse aufwärts = rechte Hand - mit Fingerkuppe locker - quasi flageolett -  
Hölse abwärts = linke Hand auf der Saite hin und her fahren.

(Steg) Bogen unbewegt stehen lassen

distinto pass. *f* *ff* *sim. sempre*

II mit Daumnagel gerieben  
*f* gilt nur für Daumen : cresc. evtl. du

as fast as possible  
gliss.  
IV

Vc. *ffp ff*

Electr.

9" ≈ 10"

play this excerpt of Cage's *Etude Boreales II*

clicktrack cue at ♩ = 63  
"2, 1" into next measure

73

Vc. *fff* *mf* *f* *ff* *mp=fff* *ppp* *mp* *f* *mp* *p* *ff*

Electr.

1.44"

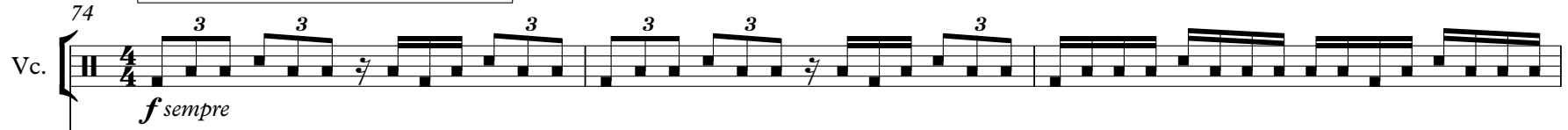
2.49"



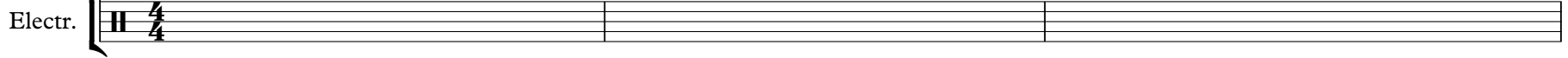
♩ = 63

♩ = 69

freely hit any part of cello wood to create low, medium and high indefinite pitch

Vc. 

**QUAN HO & BEATBOX MASHUP**

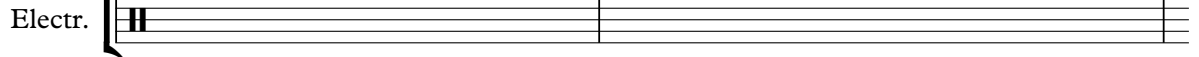
Electr. 



"scratch sound"  
*molto pont.*

♩ = 76

Vc. 

Electr. 


4.06"

2.42"



1. focus on the sound effects from playback
2. react to them (like reactionary circles) at varying speeds from ♩ to ♪
3. use the following boxed options to mimic or contrast or with other ways the sound effects

79

Vc. 

tap cello w/ hand(s):  
body/side/edge/  
fingerboard

*ppp - - fff*

0.59" ≈ 2.08"  
*bridge*

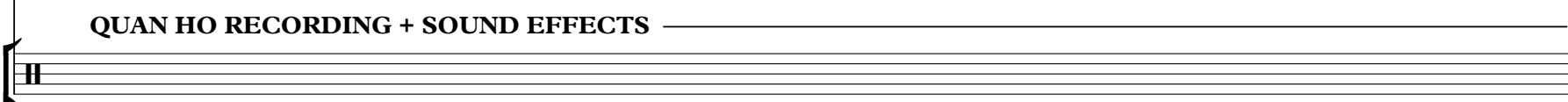
*f sempre*

*molto pont.*  
IV  
♩ highest possible

*ff*

1.06" ≈ 2.26"  
*behind bridge*

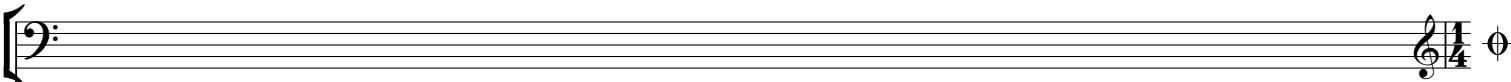
*f sempre*

Electr. 

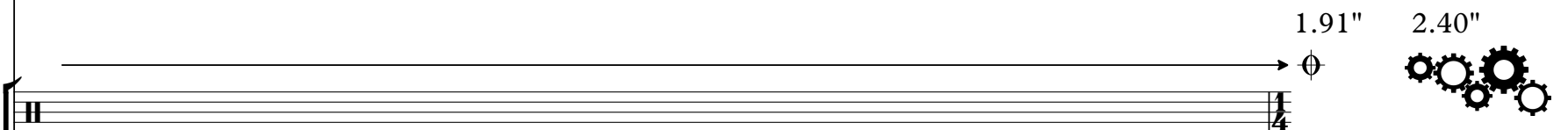
QUAN HO RECORDING + SOUND EFFECTS




80

Vc. 

clicktrack cue at ♩ = 50  
"2, 1" into next measure

Electr. 

1.91" 2.40"



circular bowing begins right after slapping fingerboard

circular bowing  
slap fingerboard then keep muted

$\text{♩} = 50$   
*pizz. pont.*  
 I  
 highest possible

81

*arco*  
 I  
 highest possible

*molto pont.*  
*tr*

*col legno battuto*

*f* *ff* *pp* *fff* *f* *p* *ffmf* *f*

clicktrack cue at  $\text{♩} = 56$   
 "2, 1" into next measure

**RECORDING ATTACKS**

3.68"

follow along with all the other parts (with the same melodic line), compromise between your own part with what you hear

$\text{♩} = \approx 56$

87

*tasto normal* → *pont.*      *normal* → *pont.*

*norm vib.* → *normal*      *normal piu vib.*

**BÈO DẠT MÂY TRÔI RECORDINGS & MIDI**

Electr.

88

→ *pont.*

*norm vib.*      → *normal*

3

0.88" 1.49"

Electr.

89

5.13" —————

